

# Statement of Basis of the Federal Operating Permit

Ascend Performance Materials Texas Inc.

Site/Area Name: AN-2/3

Physical location: On FM 2917 about 8 miles south of the intersection of Texas Hwy 35 and FM 2917

Nearest City: Alvin

County: Brazoria

Permit Number: O2321

Project Type: Renewal

Standard Industrial Classification (SIC) Code: 2869

SIC Name: Industrial Organic Chemicals

This Statement of Basis sets forth the legal and factual basis for the draft permit conditions in accordance with 30 TAC §122.201(a)(4). Per 30 TAC §§ 122.241 and 243, the permit holder has submitted an application under § 122.134 for permit renewal. This document may include the following information:

- A description of the facility/area process description;
- A basis for applying permit shields;
- A list of the federal regulatory applicability determinations;
- A table listing the determination of applicable requirements;
- A list of the New Source Review Requirements;
- The rationale for periodic monitoring methods selected;
- The rationale for compliance assurance methods selected;
- A compliance status; and
- A list of available unit attribute forms.

Prepared on: November 10, 2014

## Operating Permit Basis of Determination

### Permit Area Process Description

Acrylonitrile is produced by the ammoxidation of propylene using a process developed by SOHIO and a Monsanto patented proprietary catalyst. In this process near stoichiometric ratios of propylene, ammonia and air are reacted in a fluidized bed reactor at approximately 860°F and two atmospheres pressure in the presence of the catalyst. Acrylonitrile is the major product and hydrogen cyanide is the major by-product. These chemicals account for some 80% of the carbon reacted. Most of the balance of the carbon is converted to oxides with lesser amounts going to various organic compounds.

The reactor effluent is quenched and neutralized to remove the unreacted ammonia. The acrylonitrile and hydrogen cyanide are absorbed in water and separated as well as purified in a series of distillation columns. The absorber overheads, which is mostly nitrogen, contains carbon oxides, unreacted propylene, propane (an impurity contained in the propylene feed @ 4-6%) and other miscellaneous VOCs. This stream is routed to the waste heat boilers for destruction of hydrocarbons and VOCs.

The aqueous liquid waste streams are treated (pH adjustment and solids removal) prior to disposal in a deep injection well.

### FOPs at Site

The “application area” consists of the emission units and that portion of the site included in the application and this permit. Multiple FOPs may be issued to a site in accordance with 30 TAC § 122.201(e). When there is only one area for the site, then the application information and permit will include all units at the site. Additional FOPs that exist at the site, if any, are listed below.

Additional FOPs: O1258, O1287, O2260, O2261, O2318, O2322, O2323, O2324, O2325

### Major Source Pollutants

The table below specifies the pollutants for which the site is a major source:

Major Pollutants	VOC, NOX, HAPS, CO
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### Reading State of Texas’s Federal Operating Permit

The Title V Federal Operating Permit (FOP) lists all state and federal air emission regulations and New Source Review (NSR) authorizations (collectively known as “applicable requirements”) that apply at a particular site or permit area (in the event a site has multiple FOPs). **The FOP does not authorize new emissions or new construction activities.** The FOP begins with an introductory page which is common to all Title V permits. This page gives the details of the company, states the authority of the issuing agency, requires the company to operate in accordance with this permit and 30 Texas Administrative Code (TAC) Chapter 122, requires adherence with NSR requirements of 30 TAC Chapter 116, and finally indicates the permit number and the issuance date.

This is followed by the table of contents, which is generally composed of the following elements. Not all permits will have all of the elements.

- General Terms and Conditions
- Special Terms and Conditions
  - Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting
  - Additional Monitoring Requirements

- New Source Review Authorization Requirements
- Compliance Requirements
- Protection of Stratosphere Ozone
- Permit Location
- Permit Shield (30 TAC § 122.148)
- Attachments
  - Applicable Requirements Summary
    - Unit Summary
    - Applicable Requirements Summary
  - Additional Monitoring Requirements
  - Permit Shield
  - New Source Review Authorization References
  - Compliance Plan
  - Alternative Requirements
- Appendix A
  - Acronym list
- Appendix B
  - Copies of major NSR authorizations

## General Terms and Conditions

The General Terms and Conditions are the same and appear in all permits. The first paragraph lists the specific citations for 30 TAC Chapter 122 requirements that apply to all Title V permit holders. The second paragraph describes the requirements for record retention. The third paragraph provides details for voiding the permit, if applicable. The fourth paragraph states that the permit holder shall comply with the requirements of 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit. The fifth paragraph provides details on submission of reports required by the permit.

## Special Terms and Conditions

Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting. The TCEQ has designated certain applicable requirements as site-wide requirements. A site-wide requirement is a requirement that applies uniformly to all the units or activities at the site. Units with only site-wide requirements are addressed on Form OP-REQ1 and are not required to be listed separately on a OP-UA Form or Form OP-SUM. Form OP-SUM must list all units addressed in the application and provide identifying information, applicable OP-UA Forms, and preconstruction authorizations. The various OP-UA Forms provide the characteristics of each unit from which applicable requirements are established. Some exceptions exist as a few units may have both site-wide requirements and unit specific requirements.

Other conditions. The other entries under special terms and conditions are in general terms referring to compliance with the more detailed data listed in the attachments.

## Attachments

Applicable Requirements Summary. The first attachment, the Applicable Requirements Summary, has two tables, addressing unit specific requirements. The first table, the Unit Summary, includes a list of units with applicable requirements, the unit type, the applicable regulation, and the requirement driver. The intent of the requirement driver is to inform the reader that a given unit may have several different operating scenarios and the differences between those operating scenarios.

The applicable requirements summary table provides the detailed citations of the rules that apply to the various units. For each unit and operating scenario, there is an added modifier called the “index number,” detailed citations specifying monitoring and testing requirements, recordkeeping requirements, and reporting requirements. The data for this table are based on data supplied by the applicant on the OP-SUM and various OP-UA forms.

**Additional Monitoring Requirement.** The next attachment includes additional monitoring the applicant must perform to ensure compliance with the applicable standard. Compliance assurance monitoring (CAM) is often required to provide a reasonable assurance of compliance with applicable emission limitations/standards for large emission units that use control devices to achieve compliance with applicant requirements. When necessary, periodic monitoring (PM) requirements are specified for certain parameters (i.e. feed rates, flow rates, temperature, fuel type and consumption, etc.) to determine if a term and condition or emission unit is operating within specified limits to control emissions. These additional monitoring approaches may be required for two reasons. First, the applicable rules do not adequately specify monitoring requirements (exception- Maximum Achievable Control Technology Standards (MACTs) generally have sufficient monitoring), and second, monitoring may be required to fill gaps in the monitoring requirements of certain applicable requirements. In situations where the NSR permit is the applicable requirement requiring extra monitoring for a specific emission unit, the preferred solution is to have the monitoring requirements in the NSR permit updated so that all NSR requirements are consolidated in the NSR permit.

**Permit Shield.** A permit may or may not have a permit shield, depending on whether an applicant has applied for, and justified the granting of, a permit shield. A permit shield is a special condition included in the permit document stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirement(s) or specified applicable state-only requirement(s).

**New Source Review Authorization References.** All activities which are related to emissions in the state of Texas must have a NSR authorization prior to beginning construction. This section lists all units in the permit and the NSR authorization that allowed the unit to be constructed or modified. Units that do not have unit specific applicable requirements other than the NSR authorization do not need to be listed in this attachment. While NSR permits are not physically a part of the Title V permit, they are legally incorporated into the Title V permit by reference. Those NSR permits whose emissions exceed certain PSD/NA thresholds must also undergo a Federal review of federally regulated pollutants in addition to review for state regulated pollutants.

**Compliance Plan.** A permit may have a compliance schedule attachment for listing corrective actions plans for any emission unit that is out of compliance with an applicable requirement.

**Alternative Requirements.** This attachment will list any alternative monitoring plans or alternative means of compliance for applicable requirements that have been approved by the EPA Administrator and/or the TCEQ Executive Director.

## Appendix A

**Acronym list.** This attachment lists the common acronyms used when discussing the FOPs.

## Appendix B

Copies of major NSR authorizations applicable to the units covered by this permit have been included in this Appendix, to ensure that all interested persons can access those authorizations.

## **Stationary vents subject to 30 TAC Chapter 111, Subchapter A, § 111.111(a)(1)(B) addressed in the Special Terms and Conditions**

The site contains stationary vents with a flowrate less than 100,000 actual cubic feet per minute (acfm) and constructed either before or after January 31, 1972 which are limited, over a six-minute average, to 20% opacity

as required by 30 TAC § 111.111(a)(1)(B). As a site may have a large number of stationary vents that fall into this category, they are not required to be listed individually in the permit's Applicable Requirement Summary. This is consistent with EPA's White Paper for Streamlined Development of Part 70 Permit Applications, July 10, 1995, that states that requirements that apply identically to emission units at a site can be treated on a generic basis such as source-wide opacity limits.

Periodic monitoring is specified in Special Term and Condition 3 for stationary vents subject to 30 TAC § 111.111(a)(1)(B) to verify compliance with the 20% opacity limit. These vents are not expected to produce visible emissions during normal operation. The TCEQ evaluated the probability of these sources violating the opacity standards and determined that there is a very low potential that an opacity standard would be exceeded. It was determined that continuous monitoring for these sources is not warranted as there would be very limited environmental benefit in continuously monitoring sources that have a low potential to produce visible emissions. Therefore, the TCEQ set the visible observation monitoring frequency for these sources to once per calendar quarter.

The TCEQ has exempted vents that are not capable of producing visible emissions from periodic monitoring requirements. These vents include sources of colorless VOCs, non-fuming liquids, and other materials that cannot produce emissions that obstruct the transmission of light. Passive ventilation vents, such as plumbing vents, are also included in this category. Since this category of vents are not capable of producing opacity due to the physical or chemical characteristics of the emission source, periodic monitoring is not required as it would not yield any additional data to assure compliance with the 20% opacity standard of 30 TAC § 111.111(a)(1)(B).

In the event that visible emissions are detected, either through the quarterly observation or other credible evidence, such as observations from company personnel, the permit holder shall either report a deviation or perform a Test Method 9 observation to determine the opacity consistent with the 6-minute averaging time specified in 30 TAC § 111.111(a)(1)(B). An additional provision is included to monitor combustion sources more frequently than quarterly if alternate fuels are burned for periods greater than 24 consecutive hours. This will address possible emissions that may arise when switching fuel types.

#### **Stationary Vents subject to 30 TAC Chapter 111 not addressed in the Special Terms and Conditions**

All other stationary vents subject to 30 TAC Chapter 111 not covered in the Special Terms and Conditions are listed in the permit's Applicable Requirement Summary. The basis for the applicability determinations for these vents are listed in the Determination of Applicable Requirements table.

## Federal Regulatory Applicability Determinations

The following chart summarizes the applicability of the principal air pollution regulatory programs to the permit area:

Regulatory Program	Applicability (Yes/No)
Prevention of Significant Deterioration (PSD)	No
Nonattainment New Source Review (NNSR)	Yes
Minor NSR	Yes
40 CFR Part 60 - New Source Performance Standards	Yes
40 CFR Part 61 - National Emission Standards for Hazardous Air Pollutants (NESHAPs)	Yes
40 CFR Part 63 - NESHAPs for Source Categories	Yes
Title IV (Acid Rain) of the Clean Air Act (CAA)	No
Title V (Federal Operating Permits) of the CAA	Yes
Title VI (Stratospheric Ozone Protection) of the CAA	Yes
CAIR (Clean Air Interstate Rule)	No

## Basis for Applying Permit Shields

An operating permit applicant has the opportunity to specifically request a permit shield to document that specific applicable requirements do not apply to emission units in the permit. A permit shield is a special condition stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements. A permit shield has been requested in the application for specific emission units. For the permit shield requests that have been approved, the basis of determination for regulations that the owner/operator need not comply with are located in the "Permit Shield" attachment of the permit.

## Insignificant Activities

In general, units not meeting the criteria for inclusion on either Form OP-SUM or Form OP-REQ1 are not required to be addressed in the operating permit application. Examples of these types of units include, but are not limited to, the following:

1. Office activities such as photocopying, blueprint copying, and photographic processes.
2. Sanitary sewage collection and treatment facilities other than those used to incinerate wastewater treatment plant sludge. Stacks or vents for sanitary sewer plumbing traps are also included.
3. Food preparation facilities including, but not limited to, restaurants and cafeterias used for preparing food or beverages primarily for consumption on the premises.
4. Outdoor barbecue pits, campfires, and fireplaces.
5. Laundry dryers, extractors, and tumblers processing bedding, clothing, or other fabric items generated primarily at the premises. This does not include emissions from dry cleaning systems using perchloroethylene or petroleum solvents.
6. Facilities storing only dry, sweet natural gas, including natural gas pressure regulator vents.
7. Any air separation or other industrial gas production, storage, or packaging facility. Industrial gases, for purposes of this list, include only oxygen, nitrogen, helium, neon, argon, krypton, and xenon.

8. Storage and handling of sealed portable containers, cylinders, or sealed drums.
9. Vehicle exhaust from maintenance or repair shops.
10. Storage and use of non-VOC products or equipment for maintaining motor vehicles operated at the site (including but not limited to, antifreeze and fuel additives).
11. Air contaminant detectors and recorders, combustion controllers and shut-off devices, product analyzers, laboratory analyzers, continuous emissions monitors, other analyzers and monitors, and emissions associated with sampling activities. Exception to this category includes sampling activities that are deemed fugitive emissions and under a regulatory leak detection and repair program.
12. Bench scale laboratory equipment and laboratory equipment used exclusively for chemical and physical analysis, including but not limited to, assorted vacuum producing devices and laboratory fume hoods.
13. Steam vents, steam leaks, and steam safety relief valves, provided the steam (or boiler feedwater) has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
14. Storage of water that has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
15. Well cellars.
16. Fire or emergency response equipment and training, including but not limited to, use of fire control equipment including equipment testing and training, and open burning of materials or fuels associated with firefighting training.
17. Crucible or pot furnaces with a brim full capacity of less than 450 cubic inches of any molten metal.
18. Equipment used exclusively for the melting or application of wax.
19. All closed tumblers used for the cleaning or deburring of metal products without abrasive blasting, and all open tumblers with a batch capacity of 1,000 lbs. or less.
20. Shell core and shell mold manufacturing machines.
21. Sand or investment molds with a capacity of 100 lbs. or less used for the casting of metals;
22. Equipment used for inspection of metal products.
23. Equipment used exclusively for rolling, forging, pressing, drawing, spinning, or extruding either hot or cold metals by some mechanical means.
24. Instrument systems utilizing air, natural gas, nitrogen, oxygen, carbon dioxide, helium, neon, argon, krypton, and xenon.
25. Battery recharging areas.
26. Brazing, soldering, or welding equipment.

### **Determination of Applicable Requirements**

The tables below include the applicability determinations for the emission units, the index number(s) where applicable, and all relevant unit attribute information used to form the basis of the applicability determination. The unit attribute information is a description of the physical properties of an emission unit which is used to determine the requirements to which the permit holder must comply. For more information about the descriptions of the unit attributes specific Unit Attribute Forms may be viewed at [www.tceq.texas.gov/permitting/air/nav/air\\_all\\_ua\\_forms.html](http://www.tceq.texas.gov/permitting/air/nav/air_all_ua_forms.html).

A list of unit attribute forms is included at the end of this document. Some examples of unit attributes include construction date; product stored in a tank; boiler fuel type; etc.. Generally, multiple attributes are needed to determine the requirements for a given emission unit and index number. The table below lists these attributes in the column entitled "Basis of Determination." Attributes that demonstrate that an applicable requirement applies will be the factual basis for the specific citations in an applicable requirement that apply to a unit for that index number. The TCEQ Air Permits Division has developed flowcharts for determining applicability of state and federal regulations based on the unit attribute information in a Decision Support System (DSS). These flowcharts can be accessed via the internet at [www.tceq.texas.gov/permitting/air/nav/air\\_supportsys.html](http://www.tceq.texas.gov/permitting/air/nav/air_supportsys.html). The Air Permits Division staff may also be contacted for assistance at (512) 239-1250.

The attributes for each unit and corresponding index number provide the basis for determining the specific legal citations in an applicable requirement that apply, including emission limitations or standards, monitoring, recordkeeping, and reporting. The rules were found to apply or not apply by using the unit attributes as answers to decision questions found in the flowcharts of the DSS. Some additional attributes indicate which legal citations of a rule apply. The legal citations that apply to each emission unit may be found in the Applicable Requirements Summary table of the draft permit. There may be some entries or rows of units and rules not found in the permit, or if the permit contains a permit shield, repeated in the permit shield area. These are sets of attributes that describe negative applicability, or; in other words, the reason why a potentially applicable requirement does not apply.

If applicability determinations have been made which differ from the available flowcharts, an explanation of the decisions involved in the applicability determination is specified in the column “Changes and Exceptions to RRT.” If there were no exceptions to the DSS, then this column has been removed.

The draft permit includes all emission limitations or standards, monitoring, recordkeeping and reporting required by each applicable requirement. If an applicable requirement does not require monitoring, recordkeeping, or reporting, the word “None” will appear in the Applicable Requirements Summary table. If additional periodic monitoring is required for an applicable requirement, it will be explained in detail in the portion of this document entitled “Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected.”

When attributes demonstrate that a unit is not subject to an applicable requirement, the applicant may request a permit shield for those items. The portion of this document entitled “Basis for Applying Permit Shields” specifies which units, if any, have a permit shield.

#### Operational Flexibility

When an emission unit has multiple operating scenarios, it will have a different index number associated with each operating condition. This means that units are permitted to operate under multiple operating conditions. The applicable requirements for each operating condition are determined by a unique set of unit attributes. For example, a tank may store two different products at different points in time. The tank may, therefore, need to comply with two distinct sets of requirements, depending on the product that is stored. Both sets of requirements are included in the permit, so that the permit holder may store either product in the tank.



## Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination *
30T10-1	30 TAC Chapter 115, Storage of VOCs	R5112	<p>Today's Date = Today's date is March 1, 2013 or later.</p> <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>True Vapor Pressure = True vapor pressure is less than 1.0 psia</p> <p>Product Stored = Other than crude oil, condensate, or VOC</p>
30T10-1	40 CFR Part 60, Subpart Kb	60KB	<p>Product Stored = Volatile organic liquid</p> <p>Storage Capacity = Capacity is greater than or equal to 19,800 gallons (75,000 liters) but less than 39,900 gallons (151,000 liters)</p> <p>Maximum True Vapor Pressure = True vapor pressure is less than 2.2 psia</p>
30T11	30 TAC Chapter 115, Storage of VOCs	R5112-1	<p>Construction Date = On or after May 12, 1973</p> <p>Today's Date = Today's date is March 1, 2013 or later.</p> <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>True Vapor Pressure = True vapor pressure is less than 1.0 psia</p> <p>Product Stored = Other than crude oil, condensate, or VOC</p>
30T11	40 CFR Part 60, Subpart Kb	60KB-1	<p>Product Stored = Volatile organic liquid</p> <p>Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)</p>
30T13	30 TAC Chapter 115, Storage of VOCs	R5112-2	<p>Today's Date = Today's date is March 1, 2013 or later.</p> <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank using a submerged fill pipe</p> <p>True Vapor Pressure = True vapor pressure is less than 1.0 psia</p> <p>Product Stored = Other than crude oil, condensate, or VOC</p>
30T13	40 CFR Part 60, Subpart Kb	60KB-2	<p>Product Stored = Volatile organic liquid</p> <p>Storage Capacity = Capacity is greater than or equal to 10,600 gallons (40,000 liters) but less than 19,800 gallons (75,000 liters)</p> <p>Maximum True Vapor Pressure = True vapor pressure is less than 2.2 psia</p>
30T14	30 TAC Chapter 115, Storage of VOCs	R5112-T4	<p>Today's Date = Today's date is March 1, 2013 or later.</p> <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>True Vapor Pressure = True vapor pressure is less than 1.0 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons</p> <p>Potential to Emit = Uncontrolled emissions from an individual storage tank, or from the aggregate of tanks in a tank battery, do not have the</p>

Unit ID	Regulation	Index Number	Basis of Determination*
			potential to equal or exceed 25 tons per year on a rolling 12-month basis.
30T15	30 TAC Chapter 115, Storage of VOCs	R5112-3	<p>Today's Date = Today's date is March 1, 2013 or later.</p> <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>True Vapor Pressure = True vapor pressure is less than 1.0 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 40,000 gallons</p> <p>Potential to Emit = Uncontrolled emissions from an individual storage tank, or from the aggregate of tanks in a tank battery, do not have the potential to equal or exceed 25 tons per year on a rolling 12-month basis.</p>
30T2	30 TAC Chapter 115, Storage of VOCs	R5112-4	<p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Product Stored = Other than crude oil, condensate, or VOC</p>
30T2	40 CFR Part 60, Subpart Kb	60KB-4	Product Stored = Stored product other than volatile organic liquid or petroleum liquid
30T20	30 TAC Chapter 115, Storage of VOCs	R5112	<p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Product Stored = Other than crude oil, condensate, or VOC</p>
30T20	40 CFR Part 60, Subpart Kb	60KB	Product Stored = Stored product other than volatile organic liquid or petroleum liquid
30T27	30 TAC Chapter 115, Storage of VOCs	R5112-T27	<p>Today's Date = Today's date is March 1, 2013 or later.</p> <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>True Vapor Pressure = True vapor pressure is less than 1.0 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons</p> <p>Potential to Emit = Uncontrolled emissions from an individual storage tank, or from the aggregate of tanks in a tank battery, do not have the potential to equal or exceed 25 tons per year on a rolling 12-month basis.</p>
30T27	40 CFR Part 60, Subpart Kb	60KB	<p>Product Stored = Volatile organic liquid</p> <p>Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)</p>
30T31	30 TAC Chapter 115, Storage of VOCs	R5112	<p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is less than or equal to 1,000 gallons</p>
30T31	40 CFR Part 60, Subpart Kb	60KB	<p>Product Stored = Volatile organic liquid</p> <p>Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)</p>

Unit ID	Regulation	Index Number	Basis of Determination*
30T39	30 TAC Chapter 115, Storage of VOCs	R5112	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Product Stored = Other than crude oil, condensate, or VOC
30T39	40 CFR Part 60, Subpart Kb	60KB	Product Stored = Stored product other than volatile organic liquid or petroleum liquid
30T4	30 TAC Chapter 115, Storage of VOCs	R5112	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Product Stored = Other than crude oil, condensate, or VOC
30T4	40 CFR Part 60, Subpart Kb	60KB	Product Stored = Stored product other than volatile organic liquid or petroleum liquid
30T49	30 TAC Chapter 115, Storage of VOCs	R5112	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is less than or equal to 1,000 gallons
30T49	40 CFR Part 60, Subpart Kb	60KB	Product Stored = Volatile organic liquid Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)
30T53	30 TAC Chapter 115, Storage of VOCs	R5112	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = Other than crude oil, condensate, or VOC
30T53	40 CFR Part 60, Subpart Kb	60KB	Product Stored = Volatile organic liquid Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)
30T56	30 TAC Chapter 115, Storage of VOCs	R5112	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is less than or equal to 1,000 gallons
30T56	40 CFR Part 60, Subpart Kb	60KB	Product Stored = Volatile organic liquid Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)
30T58	30 TAC Chapter 115, Storage of VOCs	R5112	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = Other than crude oil, condensate, or VOC

Unit ID	Regulation	Index Number	Basis of Determination*
30T58	40 CFR Part 60, Subpart Kb	60KB	Product Stored = Volatile organic liquid Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)
30T60	30 TAC Chapter 115, Storage of VOCs	R5112	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Product Stored = Other than crude oil, condensate, or VOC
30T60	40 CFR Part 60, Subpart Kb	60KB	Product Stored = Stored product other than volatile organic liquid or petroleum liquid
30T61	30 TAC Chapter 115, Storage of VOCs	R5112	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = Other than crude oil, condensate, or VOC
30T61	40 CFR Part 60, Subpart Kb	60KB	Product Stored = Volatile organic liquid Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)
30T9	30 TAC Chapter 115, Storage of VOCs	R5112-5	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is less than or equal to 1,000 gallons
30T9	40 CFR Part 60, Subpart Kb	60KB-5	Product Stored = Volatile organic liquid Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)
31T10	30 TAC Chapter 115, Storage of VOCs	R5112-6	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a submerged fill pipe True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = Other than crude oil, condensate, or VOC
31T10	40 CFR Part 60, Subpart Kb	60KB-6	Product Stored = Volatile organic liquid Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)
31T12	30 TAC Chapter 115, Storage of VOCs	R5112	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is less than or equal to 1,000 gallons
31T12	40 CFR Part 60, Subpart Kb	60KB	Product Stored = Volatile organic liquid Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)
31T3	30 TAC Chapter	R5112-8	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable

Unit ID	Regulation	Index Number	Basis of Determination*
	115, Storage of VOCs		control requirements or exemption criteria. Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is less than or equal to 1,000 gallons
31T3	40 CFR Part 60, Subpart Kb	60KB-8	Product Stored = Volatile organic liquid Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)
31T35	30 TAC Chapter 115, Storage of VOCs	R5112	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = Other than crude oil, condensate, or VOC
31T35	40 CFR Part 60, Subpart Kb	60KB	Product Stored = Volatile organic liquid Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)
31T36	30 TAC Chapter 115, Storage of VOCs	R5112	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = Other than crude oil, condensate, or VOC
31T36	40 CFR Part 60, Subpart Kb	60KB	Product Stored = Volatile organic liquid Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)
31T37	30 TAC Chapter 115, Storage of VOCs	R5112	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is less than or equal to 1,000 gallons
31T37	40 CFR Part 60, Subpart Kb	60KB	Product Stored = Volatile organic liquid Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)
31T4	30 TAC Chapter 115, Storage of VOCs	R5112-T4	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = Other than crude oil, condensate, or VOC
31T4	40 CFR Part 60, Subpart Kb	60KB	Product Stored = Volatile organic liquid Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)
31T7	30 TAC Chapter	R5112-9	Today's Date = Today's date is March 1, 2013 or later.

Unit ID	Regulation	Index Number	Basis of Determination*
	115, Storage of VOCs		<p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>True Vapor Pressure = True vapor pressure is less than 1.0 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons</p> <p>Potential to Emit = Uncontrolled emissions from an individual storage tank, or from the aggregate of tanks in a tank battery, do not have the potential to equal or exceed 25 tons per year on a rolling 12-month basis.</p>
31T7	40 CFR Part 60, Subpart Kb	60KB	<p>Product Stored = Volatile organic liquid</p> <p>Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)</p>
331FRAC	30 TAC Chapter 115, Storage of VOCs	R5112	<p>Today's Date = Today's date is March 1, 2013 or later.</p> <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>True Vapor Pressure = True vapor pressure is less than 1.0 psia</p> <p>Product Stored = Other than crude oil, condensate, or VOC</p>
331T5-1	40 CFR Part 60, Subpart Kb	60KB	<p>Product Stored = Volatile organic liquid</p> <p>Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters)</p> <p>Maximum True Vapor Pressure = True vapor pressure is less than 0.5 psia</p>
331T5-1	40 CFR Part 63, Subpart G	63G	<p>Process Wastewater = The tank receives, manages, or treats process wastewater streams</p> <p>Wastewater Tank Usage = The wastewater tank is not used for heating wastewater, treating by means of an exothermic reaction, nor are the contents of the tank are sparged.</p> <p>Wastewater Tank Properties = Volume of the wastewater tank greater than or equal to 151m<sup>3</sup> and vapor pressure of liquid stored is less than 5.2 kPa</p>
331T5-2	40 CFR Part 60, Subpart Kb	60KB	<p>Product Stored = Volatile organic liquid</p> <p>Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters)</p> <p>Maximum True Vapor Pressure = True vapor pressure is less than 0.5 psia</p>
331T5-2	40 CFR Part 63, Subpart G	63G	<p>Process Wastewater = The tank receives, manages, or treats process wastewater streams</p> <p>Wastewater Tank Usage = The wastewater tank is not used for heating wastewater, treating by means of an exothermic reaction, nor are the contents of the tank are sparged.</p> <p>Wastewater Tank Properties = Volume of the wastewater tank greater than or equal to 151m<sup>3</sup> and vapor pressure of liquid stored is less than 5.2 kPa</p>
331T6	30 TAC Chapter 115, Storage of VOCs	R5112-T6	<p>Today's Date = Today's date is March 1, 2013 or later.</p> <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>True Vapor Pressure = True vapor pressure is less than 1.0 psia</p>

Unit ID	Regulation	Index Number	Basis of Determination*
			Product Stored = Other than crude oil, condensate, or VOC
331T6	40 CFR Part 60, Subpart Kb	60KB	Product Stored = Volatile organic liquid Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)
331T7	30 TAC Chapter 115, Storage of VOCs	R5112	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is less than or equal to 1,000 gallons
331T7	40 CFR Part 60, Subpart Kb	60KB	Product Stored = Volatile organic liquid Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)
30H1	30 TAC Chapter 117, Subchapter B	R7ICI-5	Diluent CEMS = The process heater does not use a carbon dioxide CEMS to monitor diluent. Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a). Unit Type = Process heater CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option Maximum Rated Capacity = Maximum rated capacity is at least 2 MMBtu/hr, but less than 40 MMBtu/hr. CO Monitoring System = Emissions are monitored using methods other than CEMS or PEMS. NOx Emission Limit Basis = Emission limit in lb/hr (or ppm by volume at 15% oxygen, dry basis) on a block one-hour average NOx Reduction = No NO <sub>x</sub> control method Fuel Type #1 = Natural gas NOx Monitoring System = Maximum emission rate testing [in accordance with 30 TAC § 117.8000] NOx Emission Limitation = Title 30 TAC §§ 117.310(d)(3) and 117.310(a)(8)
30H1	40 CFR Part 63, Subpart DDDDD	63DDDDD	CONSTRUCTION/RECONSTRUCTION DATE = Construction or reconstruction began on or before June 4, 2010.
31H1-1	30 TAC Chapter 117, Subchapter B	R7ICI-3	Diluent CEMS = The process heater does not use a carbon dioxide CEMS to monitor diluent. Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a). Unit Type = Process heater CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option Maximum Rated Capacity = Maximum rated capacity is at least 2 MMBtu/hr, but less than 40 MMBtu/hr. CO Monitoring System = Emissions are monitored using methods other than CEMS or PEMS. NOx Emission Limit Basis = Emission limit in lb/hr (or ppm by volume at 15% oxygen, dry basis) on a block one-hour average NOx Reduction = No NO <sub>x</sub> control method Fuel Type #1 = Natural gas NOx Monitoring System = Maximum emission rate testing [in accordance with 30 TAC § 117.8000] NOx Emission Limitation = Title 30 TAC §§ 117.310(d)(3) and 117.310(a)(8)
31H1-1	40 CFR Part 63, Subpart DDDDD	63DDDDD	CONSTRUCTION/RECONSTRUCTION DATE = Construction or reconstruction began on or before June 4, 2010.
31H1-2	30 TAC Chapter	R7ICI-9	Diluent CEMS = The process heater does not use a carbon dioxide CEMS to monitor diluent.

Unit ID	Regulation	Index Number	Basis of Determination*
	117, Subchapter B		<p>Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a).</p> <p>Unit Type = Process heater</p> <p>CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option</p> <p>Maximum Rated Capacity = Maximum rated capacity is at least 2 MMBtu/hr, but less than 40 MMBtu/hr.</p> <p>CO Monitoring System = Emissions are monitored using methods other than CEMS or PEMS.</p> <p>NOx Emission Limit Basis = Emission limit in lb/hr (or ppm by volume at 15% oxygen, dry basis) on a block one-hour average</p> <p>NOx Reduction = No NO<sub>x</sub> control method</p> <p>Fuel Type #1 = Natural gas</p> <p>NOx Monitoring System = Maximum emission rate testing [in accordance with 30 TAC § 117.8000]</p> <p>NOx Emission Limitation = Title 30 TAC §§ 117.310(d)(3) and 117.310(a)(8)</p>
31H1-2	40 CFR Part 63, Subpart DDDDD	63DDDDD	CONSTRUCTION/RECONSTRUCTION DATE = Construction or reconstruction began on or before June 4, 2010.
30H5	30 TAC Chapter 117, Subchapter B	R7ICI-11	<p>NOx Emission Limitation = Title 30 TAC § 117.310(d)(3) [relating to mass emissions cap and trade in 30 TAC Chapter 101, Subchapter H, Division 3 and Emission Specifications for Attainment Demonstration].</p> <p>Unit Type = Industrial, commercial, or institutional boiler regulated as an existing facility by the EPA at 40 CFR Part 266, Subpart H, as was in effect on June 9, 1993.</p> <p>Maximum Rated Capacity = MRC is greater than or equal to 250 MMBtu/hr.</p> <p>NOx Monitoring System = Continuous emissions monitoring system.</p> <p>Fuel Flow Monitoring = Unit operates with a NO<sub>x</sub> and diluent CEMS and monitors stack exhaust flow per 30 TAC §§ 117.140(a)(2)(A), 117.340(a)(2)(A) or 117.440(a)(2)(A).</p> <p>RACT Date Placed in Service = On or before November 15, 1992.</p> <p>CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option.</p> <p>CO Monitoring System = Continuous emissions monitoring system complying with 30 TAC § 117.8100(a)(1).</p> <p>EGF System Cap Unit = The unit is not used as an electric generating facility to generate electricity for sale to the electric grid.</p> <p>Fuel Type #1 = Natural gas.</p> <p>Fuel Type #2 = Gaseous fuel other than natural gas landfill gas or renewable non-fossil fuel gases.</p> <p>NOx Emission Limit Average = Emission limit in pounds/MMBtu on a rolling 30-day and 24-hour average.</p> <p>Fuel Type #3 = Liquid fuel.</p> <p>NOx Reductions = No NO<sub>x</sub> reduction.</p> <p>Annual Heat Input = Annual heat input is greater than 2.2(10<sup>11</sup>) Btu/yr, based on rolling 12-month average.</p>
30H5	40 CFR Part 60, Subpart Db	60DB	Construction/Modification Date = On or before June 19, 1984.
30H5	40 CFR Part 63, Subpart EEE	63EEE	<p>ALT Metals = Complying with the particulate matter standards.</p> <p>Type Fuel = Boiler burns liquid fuel.</p> <p>Existing Source = The boiler is an existing source (construction or reconstruction commenced on or before April 20, 2004).</p> <p>Met Feedrate = Extrapolation of feedrate levels is used for semivolatile and low volatile metals.</p> <p>Area Source = The boiler is a major source as defined under §63.2.</p>



Unit ID	Regulation	Index Number	Basis of Determination*
			CO/THC Standard = Complying with the CO standard in § 63.1216(a)(5)(i) or (b)(5)(i); or § 63.1217(a)(5)(i) or (b)(5)(i). Baghouse = The boiler is not equipped with a baghouse. Dioxin/Furan Standard = Complying with the CO standard in § 63.1217(a)(1)(ii) or (b)(1)(ii). Dioxin-Listed = The boiler does not burn the dioxin-listed hazardous wastes F020, F021, F022, F023, F026, or F027. Heating Value = The hazardous waste as-fired heating value is 10,000 Btu/lb or greater. DRE Previous Test = Previous testing was used to document conformance with the DRE standard. Hg Feedrate = Extrapolation of feedrate levels is used for Hg. Feed Zone = The source feeds waste at the normal flame zone.
31H4	30 TAC Chapter 117, Subchapter B	R7ICI-12	NOx Emission Limitation = Title 30 TAC § 117.310(d)(3) [relating to mass emissions cap and trade in 30 TAC Chapter 101, Subchapter H, Division 3 and Emission Specifications for Attainment Demonstration]. Unit Type = Industrial, commercial, or institutional boiler regulated as an existing facility by the EPA at 40 CFR Part 266, Subpart H, as was in effect on June 9, 1993. Maximum Rated Capacity = MRC is greater than or equal to 250 MMBtu/hr. NOx Monitoring System = Continuous emissions monitoring system. Fuel Flow Monitoring = Unit operates with a NO <sub>x</sub> and diluent CEMS and monitors stack exhaust flow per 30 TAC §§ 117.140(a)(2)(A), 117.340(a)(2)(A) or 117.440(a)(2)(A). RACT Date Placed in Service = On or before November 15, 1992. CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option. CO Monitoring System = Continuous emissions monitoring system complying with 30 TAC § 117.8100(a)(1). EGF System Cap Unit = The unit is not used as an electric generating facility to generate electricity for sale to the electric grid. Fuel Type #1 = Natural gas. Fuel Type #2 = Gaseous fuel other than natural gas landfill gas or renewable non-fossil fuel gases. NOx Emission Limit Average = Emission limit in pounds/MMBtu on a rolling 30-day and 24-hour average. Fuel Type #3 = Liquid fuel. NOx Reductions = No NO <sub>x</sub> reduction. Annual Heat Input = Annual heat input is greater than 2.2(10 <sup>11</sup> ) Btu/yr, based on rolling 12-month average.
31H4	40 CFR Part 60, Subpart Db	60DB	Construction/Modification Date = On or before June 19, 1984.
31H4	40 CFR Part 63, Subpart EEE	63EEE	ALT Metals = Complying with the particulate matter standards. Type Fuel = Boiler burns liquid fuel. Existing Source = The boiler is an existing source (construction or reconstruction commenced on or before April 20, 2004). Met Feedrate = Extrapolation of feedrate levels is used for semivolatile and low volatile metals. Area Source = The boiler is a major source as defined under §63.2. CO/THC Standard = Complying with the CO standard in § 63.1216(a)(5)(i) or (b)(5)(i); or § 63.1217(a)(5)(i) or (b)(5)(i). Baghouse = The boiler is not equipped with a baghouse. Dioxin/Furan Standard = Complying with the CO standard in § 63.1217(a)(1)(ii) or (b)(1)(ii). Dioxin-Listed = The boiler does not burn the dioxin-listed hazardous wastes F020, F021, F022, F023, F026, or F027.

Unit ID	Regulation	Index Number	Basis of Determination*
			<p>Heating Value = The hazardous waste as-fired heating value is 10,000 Btu/lb or greater.</p> <p>DRE Previous Test = Previous testing was used to document conformance with the DRE standard.</p> <p>Hg Feedrate = Extrapolation of feedrate levels is used for Hg.</p> <p>Feed Zone = The source feeds waste at the normal flame zone.</p>
30Z7	30 TAC Chapter 111, Visible Emissions	R1111-1	<p>Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1.</p> <p>Emergency/Upset Conditions Only = Flare is used under conditions other than emergency or upset conditions.</p>
30Z7	30 TAC Chapter 115, HRVOC Vent Gas	R5720-1	<p>Monitoring Requirements = Flare is complying with the continuous monitoring requirements of § 115.725(d).</p> <p>Out of Service = Flare was not permanently out of service by April 1, 2006.</p> <p>Total Gas Stream = Flare receives a total gas stream with greater than 100 ppmv HRVOC at some time.</p> <p>Gas Stream Concentration = Flare receives a gas stream containing 5% or greater HRVOC by weight at some time.</p> <p>Multi-Purpose Usage = Flare is used for abatement of emissions from scheduled or unscheduled maintenance, startup or shutdown activities AND as an emergency flare.</p> <p>Flow Rate = Flow rate of the gas routed to the flare is determined using the requirements of § 115.725(d)(1).</p> <p>Alternative Monitoring = No alternative monitoring and test methods are used.</p> <p>Physical Seal = Flare is equipped with a flow monitor or indicator.</p> <p>Minor Modification = No minor modifications to the monitoring and test methods are used.</p> <p>Tank Service = Flare is not in dedicated service for storage tanks with 95% or greater of an individual HRVOC.</p> <p>Flare Type = Flare is in multi-purpose service.</p>
30Z7	40 CFR Part 60, Subpart A	60A-1	<p>Subject to 40 CFR § 60.18 = Flare is subject to 40 CFR § 60.18.</p> <p>Adhering to Heat Content Specifications = Adhering to the heat content specifications in 40 CFR § 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR § 60.18(c)(4).</p> <p>Flare Assist Type = Non-assisted</p> <p>Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec)</p>
30Z7	40 CFR Part 63, Subpart A	63A-1	<p>Required Under 40 CFR Part 63 = Flare is required by a Subpart under 40 CFR Part 63.</p> <p>Heat Content Specification = Adhering to the heat content specifications in 40 CFR § 63.11(b)(6)(ii) and the maximum tip velocity specifications in 40 CFR § 63.11(b)(7) or 40 CFR § 63.11(b)(8).</p> <p>Flare Assist Type = Non-assisted</p> <p>Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec)</p>
31Z4	30 TAC Chapter 111, Visible Emissions	R1111-2	<p>Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1.</p> <p>Emergency/Upset Conditions Only = Flare is used under conditions other than emergency or upset conditions.</p>
31Z4	30 TAC Chapter 115, HRVOC Vent Gas	R5720-2	<p>Monitoring Requirements = Flare is complying with the continuous monitoring requirements of § 115.725(d).</p> <p>Out of Service = Flare was not permanently out of service by April 1, 2006.</p> <p>Total Gas Stream = Flare receives a total gas stream with greater than 100 ppmv HRVOC at some time.</p> <p>Gas Stream Concentration = Flare receives a gas stream containing 5% or greater HRVOC by weight at some time.</p> <p>Multi-Purpose Usage = Flare is used for abatement of emissions from scheduled or unscheduled maintenance, startup or shutdown activities AND as an emergency flare.</p>

Unit ID	Regulation	Index Number	Basis of Determination*
			<p>Flow Rate = Flow rate of the gas routed to the flare is determined using the requirements of § 115.725(d)(1).</p> <p>Alternative Monitoring = No alternative monitoring and test methods are used.</p> <p>Physical Seal = Flare is equipped with a flow monitor or indicator.</p> <p>Minor Modification = No minor modifications to the monitoring and test methods are used.</p> <p>Tank Service = Flare is not in dedicated service for storage tanks with 95% or greater of an individual HRVOC.</p> <p>Flare Type = Flare is in multi-purpose service.</p>
31Z4	40 CFR Part 60, Subpart A	60A-2	<p>Subject to 40 CFR § 60.18 = Flare is subject to 40 CFR § 60.18.</p> <p>Adhering to Heat Content Specifications = Adhering to the heat content specifications in 40 CFR § 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR § 60.18(c)(4).</p> <p>Flare Assist Type = Non-assisted</p> <p>Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec)</p>
31Z4	40 CFR Part 63, Subpart A	63A-2	<p>Required Under 40 CFR Part 63 = Flare is required by a Subpart under 40 CFR Part 63.</p> <p>Heat Content Specification = Adhering to the heat content specifications in 40 CFR § 63.11(b)(6)(ii) and the maximum tip velocity specifications in 40 CFR § 63.11(b)(7) or 40 CFR § 63.11(b)(8).</p> <p>Flare Assist Type = Non-assisted</p> <p>Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec)</p>
30ISBLFUG	30 TAC Chapter 115, HRVOC Fugitive Emissions	R5780-ALL	OWNER/OPERATOR ASSUMES HRVOC FUGITIVE CONTROL REQUIREMENTS FOR ALL COMPONENTS SUBJECT TO 30 TAC Chapter 115, HRVOC Fugitive Emissions WITH NO ALTERNATE CONTROL OR CONTROL DEVICE
30ISBLFUG	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	R5352-ALL	SOP/GOP Index No. = Owner/Operator assumes VOC fugitive control requirements for all components subject to 30 TAC Chapter 115, Subchapter D, Division 3 with no alternate control or control device.
30ISBLFUG	40 CFR Part 63, Subpart H	63H-ALL	<p>SOP Index No. = Owner/Operator assumes fugitive control requirements for all components in VOC or VHAP service subject to 40 CFR Part 63, Subpart H with no alternated control or control device.</p> <p>ANY (CLOSED VENT SYSTEMS) = COMPONENT PRESENT</p> <p>EQUIPMENT TYPE = FUGITIVE UNIT CONTAINS EQUIPMENT LISTED IN 40 CFR § 63.160(A) WHICH IS OPERATED IN ORGANIC HAZARDOUS AIR POLLUTANT SERVICE</p> <p>NON RESEARCH AND DEVELOPMENT/BATCH PROCESSES = FUGITIVE UNIT CONTAINS PROCESSES OTHER THAN RESEARCH AND DEVELOPMENT FACILITIES AND BENCH-SCALE BATCH PROCESSES</p> <p>VACUUM SERVICE = NOT ALL OF THE EQUIPMENT IN THE FUGITIVE UNIT IS IN VACUUM SERVICE</p> <p>FLARES (CLOSED VENT SYSTEMS) = COMPONENT PRESENT</p>
30ISBLFUG	40 CFR Part 63, Subpart YY	63YY	<p>Source Type = Cyanide Chemicals Production.</p> <p>Equipment Type = The fugitive unit contains equipment, as defined in § 63.1101, contacting hazardous air pollutants in Tables 1 through 7 or Table 9, as appropriate.</p>
30H5	30 TAC Chapter 111, Visible Emissions	R1111	<p>Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.</p> <p>Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit.</p> <p>Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical</p>

Unit ID	Regulation	Index Number	Basis of Determination*
			instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3). Construction Date = On or before January 31, 1972 Effluent Flow Rate = Effluent flow rate is at least 100,000 actual cubic feet per minute.
30PROC-AIS	30 TAC Chapter 115, Vent Gas Controls	R5121	Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.
30S13	30 TAC Chapter 115, HRVOC Vent Gas	R5720-1	HRVOC Concentration = The vent gas stream has a HRVOC concentration of at least 100 ppmv at some times. Max Flow Rate = The vent gas stream has a maximum potential flow rate greater than 100 dry standard cubic feet per hour (ft <sup>3</sup> /hr). Vent Gas Stream Control = Vent gas stream is controlled by a flare.
30S13	30 TAC Chapter 115, Vent Gas Controls	R5121	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Smokeless flare Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10.
30S13	40 CFR Part 63, Subpart G	63G	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used. Control Device = Flare Overlap = Title 40 CFR Part 60, Subpart NNN Group 1 = The process vent meets the definition of a Group 1 process vent. Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118. Halogenated = Vent stream is not halogenated. By-pass Lines = The vent system does not contain by-pass lines that can divert the vent stream from the control device. Performance Test = No previous performance test was conducted.
30S33	30 TAC Chapter 115, Vent Gas Controls	R5121	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor.

Unit ID	Regulation	Index Number	Basis of Determination*
			Vent Type = Vent gas stream is emitted from an air oxidation synthetic organic chemical manufacturing process.
3oS33	40 CFR Part 63, Subpart G	63G	<p>Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used.</p> <p>Control Device = Boiler or process heater with a design heat input capacity of greater than 44 MW.</p> <p>Overlap = Title 40 CFR Part 60, Subpart III</p> <p>Group 1 = The process vent meets the definition of a Group 1 process vent.</p> <p>Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118.</p> <p>Halogenated = Vent stream is not halogenated.</p> <p>By-pass Lines = The vent system contains by-pass lines that can divert the vent stream from the control device.</p> <p>Flow Indicator = A flow indicator is installed and operated at the entrance of the by-pass line.</p> <p>Performance Test = No previous performance test was conducted.</p>
3oSAMPCAB	30 TAC Chapter 115, Vent Gas Controls	R5121	<p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p> <p>Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.</p> <p>Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg).</p> <p>VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.</p>
3oT33	30 TAC Chapter 115, Vent Gas Controls	R5121	<p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p> <p>Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.</p> <p>Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg).</p> <p>VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.</p>
3oT62	30 TAC Chapter 115, Vent Gas Controls	R5121	<p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p> <p>Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.</p> <p>Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg).</p> <p>VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.</p>
31H4	30 TAC Chapter 111, Visible	R1111	<p>Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.</p> <p>Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst</p>

Unit ID	Regulation	Index Number	Basis of Determination*
	Emissions		<p>regenerator for a fluid bed catalytic cracking unit.</p> <p>Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3).</p> <p>Construction Date = On or before January 31, 1972</p> <p>Effluent Flow Rate = Effluent flow rate is at least 100,000 actual cubic feet per minute.</p>
31PROC-AIS	30 TAC Chapter 115, Vent Gas Controls	R5121	<p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p> <p>Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.</p> <p>Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg).</p> <p>VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.</p>
31S14	30 TAC Chapter 115, HRVOC Vent Gas	R5720-2	<p>HRVOC Concentration = The vent gas stream has a HRVOC concentration of at least 100 ppmv at some times.</p> <p>Max Flow Rate = The vent gas stream has a maximum potential flow rate greater than 100 dry standard cubic feet per hour (ft<sup>3</sup>/hr).</p> <p>Vent Gas Stream Control = Vent gas stream is controlled by a flare.</p>
31S14	30 TAC Chapter 115, Vent Gas Controls	R5121	<p>Alternate Control Requirement = Alternate control is not used.</p> <p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p> <p>Control Device Type = Smokeless flare</p> <p>Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10.</p>
31S14	40 CFR Part 63, Subpart G	63G	<p>Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used.</p> <p>Control Device = Flare</p> <p>Overlap = Title 40 CFR Part 60, Subpart NNN</p> <p>Group 1 = The process vent meets the definition of a Group 1 process vent.</p> <p>Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118.</p> <p>Halogenated = Vent stream is not halogenated.</p> <p>By-pass Lines = The vent system does not contain by-pass lines that can divert the vent stream from the control device.</p> <p>Performance Test = No previous performance test was conducted.</p>
31S27	30 TAC Chapter 115, Vent Gas Controls	R5121	<p>Alternate Control Requirement = Alternate control is not used.</p> <p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p>

Unit ID	Regulation	Index Number	Basis of Determination*
			Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor. Vent Type = Vent gas stream is emitted from an air oxidation synthetic organic chemical manufacturing process.
31S27	40 CFR Part 63, Subpart G	63G	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used. Control Device = Boiler or process heater with a design heat input capacity of greater than 44 MW. Overlap = Title 40 CFR Part 60, Subpart III Group 1 = The process vent meets the definition of a Group 1 process vent. Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118. Halogenated = Vent stream is not halogenated. By-pass Lines = The vent system contains by-pass lines that can divert the vent stream from the control device. Flow Indicator = A flow indicator is installed and operated at the entrance of the by-pass line. Performance Test = No previous performance test was conducted.
31SAMPCAB	30 TAC Chapter 115, Vent Gas Controls	R5121	Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.
31T14	30 TAC Chapter 115, Vent Gas Controls	R5121	Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.
31T16	30 TAC Chapter 115, Vent Gas Controls	R5121	Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.

Unit ID	Regulation	Index Number	Basis of Determination*
31T38	30 TAC Chapter 115, Vent Gas Controls	R5121	<p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p> <p>Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.</p> <p>Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg).</p> <p>VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.</p>
PRO_30R1-1/6	40 CFR Part 60, Subpart III	60III	<p>Construction/Modification Date = After October 21, 1983.</p> <p>Affected Facility = Facility is not subject to 40 CFR Part 60, Subpart III.</p>
PRO_31R1-1/2	40 CFR Part 60, Subpart III	60III	<p>Construction/Modification Date = After October 21, 1983.</p> <p>Affected Facility = Facility is not subject to 40 CFR Part 60, Subpart III.</p>
PRO_30CMPU	40 CFR Part 63, Subpart F	63F-1	<p>Applicable Chemicals = The chemical manufacturing process unit manufactures, as a primary product, one or more of the chemicals listed in 40 CFR § 63.100(b)(1)(i) or 40 CFR § 63.100(b)(1)(ii).</p> <p>Intervening Cooling Fluid = There is no intervening cooling fluid containing less than 5 percent by weight of total HAPs listed in Table 4 of 40 CFR Part 63, Subpart F, between the process and cooling water.</p> <p>Table 2 HAP = The chemical manufacturing process unit uses as a reactant or manufactures, as a product or co-product, one or more of the organic hazardous air pollutants in Table 2.</p> <p>Table 4 HAP Content = The recirculating heat exchange system is not used exclusively to cool process fluids that contain less than 5 percent by weight of total HAPs listed in Table 4 of title 40 CFR Part 63, Subpart F.</p> <p>Alternate Means of Emission Limitation = No alternative means of emission limitation has been approved by the EPA Administrator to achieve a reduction in organic HAP emission or no alternate has been requested.</p> <p>NPDES Permit = The once-through heat exchange system is not subject to NPDES permit with an allowable discharge limit of 1 part per million or less above influent concentration or 10 percent or less above influent concentration.</p> <p>Meets 40 CFR 63.104(a)(4)(i)-(iv) = The once-through heat exchange system is not subject to an NPDES permit that meets 40 CFR § 63.104(a)(4)(i) - (iv).</p> <p>Heat Exchange System = A heat exchange system is utilized.</p> <p>Table 9 HAP Content = The once-through heat exchange system is used exclusively to cool process fluids that contain less than 5 percent by weight of total HAPs listed in Table 9 of 40 CFR Part 63, Subpart G.</p> <p>Cooling Water Monitored = The cooling water is being monitored for the presence of one or more HAPs or other representative substances whose presence in cooling water indicates a leak.</p> <p>Cooling Water Pressure = The heat exchange system is operated with the minimum pressure on the cooling water side at least 35 kilopascals greater than the maximum pressure on the process side.</p>
PRO_31CMPU	40 CFR Part 63, Subpart F	63F-2	<p>Applicable Chemicals = The chemical manufacturing process unit manufactures, as a primary product, one or more of the chemicals listed in 40 CFR § 63.100(b)(1)(i) or 40 CFR § 63.100(b)(1)(ii).</p> <p>Intervening Cooling Fluid = There is no intervening cooling fluid containing less than 5 percent by weight of total HAPs listed in Table 4 of 40 CFR Part 63, Subpart F, between the process and cooling water.</p> <p>Table 2 HAP = The chemical manufacturing process unit uses as a reactant or manufactures, as a product or co-product, one or more of the organic hazardous air pollutants in Table 2.</p> <p>Table 4 HAP Content = The recirculating heat exchange system is not used exclusively to cool process fluids that contain less than 5 percent by</p>



Unit ID	Regulation	Index Number	Basis of Determination*
			<p>weight of total HAPs listed in Table 4 of title 40 CFR Part 63, Subpart F.</p> <p>Alternate Means of Emission Limitation = No alternative means of emission limitation has been approved by the EPA Administrator to achieve a reduction in organic HAP emission or no alternate has been requested.</p> <p>NPDES Permit = The once-through heat exchange system is not subject to NPDES permit with an allowable discharge limit of 1 part per million or less above influent concentration or 10 percent or less above influent concentration.</p> <p>Meets 40 CFR 63.104(a)(4)(i)-(iv) = The once-through heat exchange system is not subject to an NPDES permit that meets 40 CFR § 63.104(a)(4)(i) - (iv).</p> <p>Heat Exchange System = A heat exchange system is utilized.</p> <p>Table 9 HAP Content = The once-through heat exchange system is used exclusively to cool process fluids that contain less than 5 percent by weight of total HAPs listed in Table 9 of 40 CFR Part 63, Subpart G.</p> <p>Cooling Water Monitored = The cooling water is being monitored for the presence of one or more HAPs or other representative substances whose presence in cooling water indicates a leak.</p> <p>Cooling Water Pressure = The heat exchange system is operated with the minimum pressure on the cooling water side at least 35 kilopascals greater than the maximum pressure on the process side.</p>

\* - The “unit attributes” or operating conditions that determine what requirements apply

## NSR versus Title V FOP

The state of Texas has two Air permitting programs, New Source Review (NSR) and Title V Federal Operating Permits. The two programs are substantially different both in intent and permit content.

NSR is a preconstruction permitting program authorized by the Texas Clean Air Act and Title I of the Federal Clean Air Act (FCAA). The processing of these permits is governed by 30 Texas Administrative Code (TAC) Chapter 116.111. The Title V Federal Operating Program is a federal program authorized under Title V of the FCAA that has been delegated to the state of Texas to administer and is governed by 30 TAC Chapter 122. The major differences between the two permitting programs are listed in the table below:

NSR Permit	Federal Operating Permit(FOP)
Issued Prior to new Construction or modification of an existing facility	For initial permit with application shield, can be issued after operation commences; significant revisions require approval prior to operation.
Authorizes air emissions	Codifies existing applicable requirements, does not authorize new emissions
Ensures issued permits are protective of the environment and human health by conducting a health effects review and that requirement for best available control technology (BACT) is implemented.	Applicable requirements listed in permit are used by the inspectors to ensure proper operation of the site as authorized. Ensures that adequate monitoring is in place to allow compliance determination with the FOP.
Up to two Public notices may be required. Opportunity for public comment and contested case hearings for some authorizations.	One public notice required. Opportunity for public comments. No contested case hearings.
Applies to all point source emissions in the state.	Applies to all major sources and some non-major sources identified by the EPA.
Applies to facilities: a portion of site or individual emission sources	One or multiple FOPs cover the entire site (consists of multiple facilities)
Permits include terms and conditions under which the applicant must construct and operate its various equipment and processes on a facility basis.	Permits include terms and conditions that specify the general operational requirements of the site; and also include codification of all applicable requirements for emission units at the site.
Opportunity for EPA review for Federal Prevention of Significant Deterioration (PSD) and Nonattainment (NA) permits for major sources.	Opportunity for EPA review, Affected states review, and a Public petition period for every FOP.
Permits have a table listing maximum emission limits for pollutants	Permit has an applicable requirements table and Periodic Monitoring (PM) / Compliance Assurance Monitoring (CAM) tables which document applicable monitoring requirements.
Permits can be altered or amended upon application by company. Permits must be issued before construction or modification of facilities can begin.	Permits can be revised through several revision processes, which provide for different levels of public notice and opportunity to comment. Changes that would be significant revisions require that a revised permit be issued before those changes can be operated.
NSR permits are issued independent of FOP requirements.	FOP are independent of NSR permits, but contain a list of all NSR permits incorporated by reference

## New Source Review Requirements

Below is a list of the New Source Review (NSR) permits for the permitted area. These NSR permits are incorporated by reference into the operating permit and are enforceable under it. These permits can be found in the main TCEQ file room, located on the first floor of Building E, 12100 Park 35 Circle, Austin, Texas. The

Public Education Program may be contacted at 1-800-687-4040 or the Air Permits Division (APD) may be contacted at 1-512-239-1250 for help with any question.

Additionally, the site contains emission units that are permitted by rule under the requirements of 30 TAC Chapter 106, Permits by Rule. The following table specifies the permits by rule that apply to the site. All current permits by rule are contained in Chapter 106. Outdated 30 TAC Chapter 106 permits by rule may be viewed at the following Web site:

[www.tceq.texas.gov/permitting/air/permitbyrule/historical\\_rules/old106list/index106.html](http://www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/old106list/index106.html)

Outdated Standard Exemption lists may be viewed at the following Web site:

[www.tceq.texas.gov/permitting/air/permitbyrule/historical\\_rules/oldselist/se\\_index.html](http://www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/oldselist/se_index.html)

<b>Nonattainment (NA) Permits</b>	
NA Permit No.: NO11	Issuance Date: 11/10/2014
<b>Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.</b>	
Authorization No.: 18251	Issuance Date: 11/10/2014
<b>Permits By Rule (30 TAC Chapter 106) for the Application Area</b>	
Number: 106.263	Version No./Date: 11/01/2001
Number: 106.373	Version No./Date: 09/04/2000
Number: 106.472	Version No./Date: 09/04/2000

### **Emission Units and Emission Points**

In air permitting terminology, any source capable of generating emissions (for example, an engine or a sandblasting area) is called an Emission Unit. For purposes of Title V, emission units are specifically listed in the operating permit when they have applicable requirements other than New Source Review (NSR), or when they are listed in the permit shield table.

The actual physical location where the emissions enter the atmosphere (for example, an engine stack or a sandblasting yard) is called an emission point. For New Source Review preconstruction permitting purposes, every emission unit has an associated emission point. Emission limits are listed in an NSR permit, associated with an emission point. This list of emission points and emission limits per pollutant is commonly referred to as the "Maximum Allowable Emission Rate Table", or "MAERT" for short. Specifically, the MAERT lists the Emission Point Number (EPN) that identifies the emission point, followed immediately by the Source Name, identifying the emission unit that is the source of those emissions on this table.

Thus, by reference, an emission unit in a Title V operating permit is linked by reference number to an NSR authorization, and its related emission point.

### **Monitoring Sufficiency**

Federal and state rules, 40 CFR § 70.6(a)(3)(i)(B) and 30 TAC § 122.142(c) respectively, require that each federal operating permit include additional monitoring for applicable requirements that lack periodic or instrumental monitoring (which may include recordkeeping that serves as monitoring) that yields reliable data from a relevant time period that are representative of the emission unit's compliance with the applicable emission limitation or standard. Furthermore, the federal operating permit must include compliance assurance monitoring (CAM) requirements for emission sources that meet the applicability criteria of 40 CFR Part 64 in accordance with 40 CFR § 70.6(a)(3)(i)(A) and 30 TAC § 122.604(b).

With the exception of any emission units listed in the Periodic Monitoring or CAM Summaries in the FOP, the TCEQ Executive Director has determined that the permit contains sufficient monitoring, testing, recordkeeping, and reporting requirements that assure compliance with the applicable requirements. If applicable, each emission unit that requires additional monitoring in the form of periodic monitoring or CAM is described in further detail under the Rationale for CAM/PM Methods Selected section following this paragraph.

## **Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected**

### **Periodic Monitoring:**

The Federal Clean Air Act requires that each federal operating permit include monitoring sufficient to assure compliance with the terms and conditions of the permit. Most of the emission limits and standards applicable to emission units at Title V sources include adequate monitoring to show that the units meet the limits and standards. For those requirements that do not include monitoring, or where the monitoring is not sufficient to assure compliance, the federal operating permit must include such monitoring for the emission units affected. The following emission units are subject to periodic monitoring requirements because the emission units are subject to an emission limitation or standard for an air pollutant (or surrogate thereof) in an applicable requirement that does not already require monitoring, or the monitoring for the applicable requirement is not sufficient to assure compliance:

<b>Unit/Group/Process Information</b>	
ID No.: 30H5	
Control Device ID No.: N/A	Control Device Type: N/A
<b>Applicable Regulatory Requirement</b>	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111
Pollutant: OPACITY	Main Standard: § 111.111(a)(1)(C)
<b>Monitoring Information</b>	
Indicator: Fuel Type	
Minimum Frequency: Annually or at any time an alternate fuel is used	
Averaging Period: n/a	
Deviation Limit: Firing an alternate fuel for greater than 24 consecutive hours without conducting a visible emission observation; visible emissions are observed and a Test Method 9 is not performed; or opacity greater than 15%.	
Basis of monitoring: Industry has demonstrated through performance tests and historical data that opacity and particulate matter standards are consistently met when combustion units fire natural gas only. If the emission unit fires a different fuel for more than 24 hours, the permit holder may elect to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.	

Unit/Group/Process Information	
ID No.: 31H4	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111
Pollutant: OPACITY	Main Standard: § 111.111(a)(1)(C)
Monitoring Information	
Indicator: Fuel Type	
Minimum Frequency: Annually or at any time an alternate fuel is used	
Averaging Period: n/a	
Deviation Limit: Firing an alternate fuel for greater than 24 consecutive hours without conducting a visible emission observation; visible emissions are observed and a Test Method 9 is not performed; or opacity greater than 15%.	
<p>Basis of monitoring:</p> <p>Industry has demonstrated through performance tests and historical data that opacity and particulate matter standards are consistently met when combustion units fire natural gas only. If the emission unit fires a different fuel for more than 24 hours, the permit holder may elect to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.</p>	

**Compliance Assurance Monitoring (CAM):**

Compliance Assurance Monitoring (CAM) is a federal monitoring program established under Title 40 Code of Federal Regulations Part 64 (40 CFR Part 64).

Emission units are subject to CAM requirements if they meet the following criteria:

1. the emission unit is subject to an emission limitation or standard for an air pollutant (or surrogate thereof) in an applicable requirement;
2. the emission unit uses a control device to achieve compliance with the emission limitation or standard specified in the applicable requirement; and
3. the emission unit has the pre-control device potential to emit greater than or equal to the amount in tons per year for a site to be classified as a major source.

The following table(s) identify the emission unit(s) that are subject to CAM:

<b>Unit/Group/Process Information</b>	
ID No.: 30S33	
Control Device ID No.: 30H5	Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is greater than or equal to 44MW)
<b>Applicable Regulatory Requirement</b>	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121
Pollutant: VOC	Main Standard: § 115.121(a)(2)
<b>Monitoring Information</b>	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: four times per hour	
Averaging Period: one hour	
Deviation Limit: Combustion temperature greater than or equal to 1471 F when AOG vent is routed to 30H5. Combustion temperature greater than or equal to 1540 F when liquid HCN waste is routed to 30H5.	
Basis of CAM: It is widely practiced and accepted to use performance tests, manufacturer's recommendations, engineering calculations and/or historical data to establish a minimum temperature for boilers/process heaters. This minimum temperature must be maintained in order for the proper destruction efficiency. Operation below the minimum combustion temperature will result in incomplete combustion and potential noncompliance with emission limitations and/or standards. The monitoring of combustion temperature of a boiler/process heater is commonly required in federal and state rules, including: 40 CFR Part 60, Subparts III, NNN, and RRR; 40 CFR Part 61, Subparts BB and FF; 40 CFR Part 63, Subparts G, DD, and HH; and 30 TAC Chapter 115.	

Unit/Group/Process Information	
ID No.: 31S27	
Control Device ID No.: 31H4	Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is greater than or equal to 44MW)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121
Pollutant: VOC	Main Standard: § 115.121(a)(2)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: four times per hour	
Averaging Period: one hour	
Deviation Limit: Combustion temperature greater than or equal to 1486 F when AOG vent is routed to 31H4. Combustion temperature greater than or equal to 1540 F when liquid HCN waste is routed to 31H4.	
Basis of CAM: It is widely practiced and accepted to use performance tests, manufacturer's recommendations, engineering calculations and/or historical data to establish a minimum temperature for boilers/process heaters. This minimum temperature must be maintained in order for the proper destruction efficiency. Operation below the minimum combustion temperature will result in incomplete combustion and potential noncompliance with emission limitations and/or standards. The monitoring of combustion temperature of a boiler/process heater is commonly required in federal and state rules, including: 40 CFR Part 60, Subparts III, NNN, and RRR; 40 CFR Part 61, Subparts BB and FF; 40 CFR Part 63, Subparts G, DD, and HH; and 30 TAC Chapter 115.	

## Compliance Review

1. In accordance with 30 TAC Chapter 60, the compliance history was reviewed on 10/31/2014.
2. The compliance history review evaluated the period from 09/26/2009 to 09/26/2014.

Site rating: 14.31 Company rating: 14.31

(High < 0.10; Satisfactory > 0.10 and < 55; Unsatisfactory > 55)

3. Has the permit changed on the basis of the compliance history or site/company rating? .....No

## Site/Permit Area Compliance Status Review

1. Were there any out-of-compliance units listed on Form OP-ACPS? .....No
2. Is a compliance plan and schedule included in the permit?.....No

## Available Unit Attribute Forms

OP-UA1 - Miscellaneous and Generic Unit Attributes  
OP-UA2 - Stationary Reciprocating Internal Combustion Engine Attributes  
OP-UA3 - Storage Tank/Vessel Attributes  
OP-UA4 - Loading/Unloading Operations Attributes  
OP-UA5 - Process Heater/Furnace Attributes  
OP-UA6 - Boiler/Steam Generator/Steam Generating Unit Attributes  
OP-UA7 - Flare Attributes  
OP-UA8 - Coal Preparation Plant Attributes  
OP-UA9 - Nonmetallic Mineral Process Plant Attributes  
OP-UA10 - Gas Sweetening/Sulfur Recovery Unit Attributes  
OP-UA11 - Stationary Turbine Attributes  
OP-UA12 - Fugitive Emission Unit Attributes  
OP-UA13 - Industrial Process Cooling Tower Attributes  
OP-UA14 - Water Separator Attributes  
OP-UA15 - Emission Point/Stationary Vent/Distillation Operation/Process Vent Attributes  
OP-UA16 - Solvent Degreasing Machine Attributes  
OP-UA17 - Distillation Unit Attributes  
OP-UA18 - Surface Coating Operations Attributes  
OP-UA19 - Wastewater Unit Attributes  
OP-UA20 - Asphalt Operations Attributes  
OP-UA21 - Grain Elevator Attributes  
OP-UA22 - Printing Attributes  
OP-UA24 - Wool Fiberglass Insulation Manufacturing Plant Attributes  
OP-UA25 - Synthetic Fiber Production Attributes  
OP-UA26 - Electroplating and Anodizing Unit Attributes  
OP-UA27 - Nitric Acid Manufacturing Attributes  
OP-UA28 - Polymer Manufacturing Attributes  
OP-UA29 - Glass Manufacturing Unit Attributes  
OP-UA30 - Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mill Attributes  
OP-UA31 - Lead Smelting Attributes  
OP-UA32 - Copper and Zinc Smelting/Brass and Bronze Production Attributes  
OP-UA33 - Metallic Mineral Processing Plant Attributes  
OP-UA34 - Pharmaceutical Manufacturing  
OP-UA35 - Incinerator Attributes  
OP-UA36 - Steel Plant Unit Attributes  
OP-UA37 - Basic Oxygen Process Furnace Unit Attributes  
OP-UA38 - Lead-Acid Battery Manufacturing Plant Attributes  
OP-UA39 - Sterilization Source Attributes  
OP-UA40 - Ferroalloy Production Facility Attributes  
OP-UA41 - Dry Cleaning Facility Attributes



OP-UA42 - Phosphate Fertilizer Manufacturing Attributes  
OP-UA43 - Sulfuric Acid Production Attributes  
OP-UA44 - Municipal Solid Waste Landfill/Waste Disposal Site Attributes  
OP-UA45 - Surface Impoundment Attributes  
OP-UA46 - Epoxy Resins and Non-Nylon Polyamides Production Attributes  
OP-UA47 - Ship Building and Ship Repair Unit Attributes  
OP-UA48 - Air Oxidation Unit Process Attributes  
OP-UA49 - Vacuum-Producing System Attributes  
OP-UA50 - Fluid Catalytic Cracking Unit Catalyst Regenerator/Fuel Gas Combustion Device/Claus Sulfur Recovery Plant Attributes  
OP-UA51 - Dryer/Kiln/Oven Attributes  
OP-UA52 - Closed Vent Systems and Control Devices  
OP-UA53 - Beryllium Processing Attributes  
OP-UA54 - Mercury Chlor-Alkali Cell Attributes  
OP-UA55 - Transfer System Attributes  
OP-UA56 - Vinyl Chloride Process Attributes  
OP-UA57 - Cleaning/Depainting Operation Attributes  
OP-UA58 - Treatment Process Attributes  
OP-UA59 - Coke By-Product Recovery Plant Attributes  
OP-UA60 - Chemical Manufacturing Process Unit Attributes  
OP-UA61 - Pulp, Paper, or Paperboard Producing Process Attributes  
OP-UA62 - Glycol Dehydration Unit Attributes  
OP-UA63 - Vegetable Oil Production Attributes